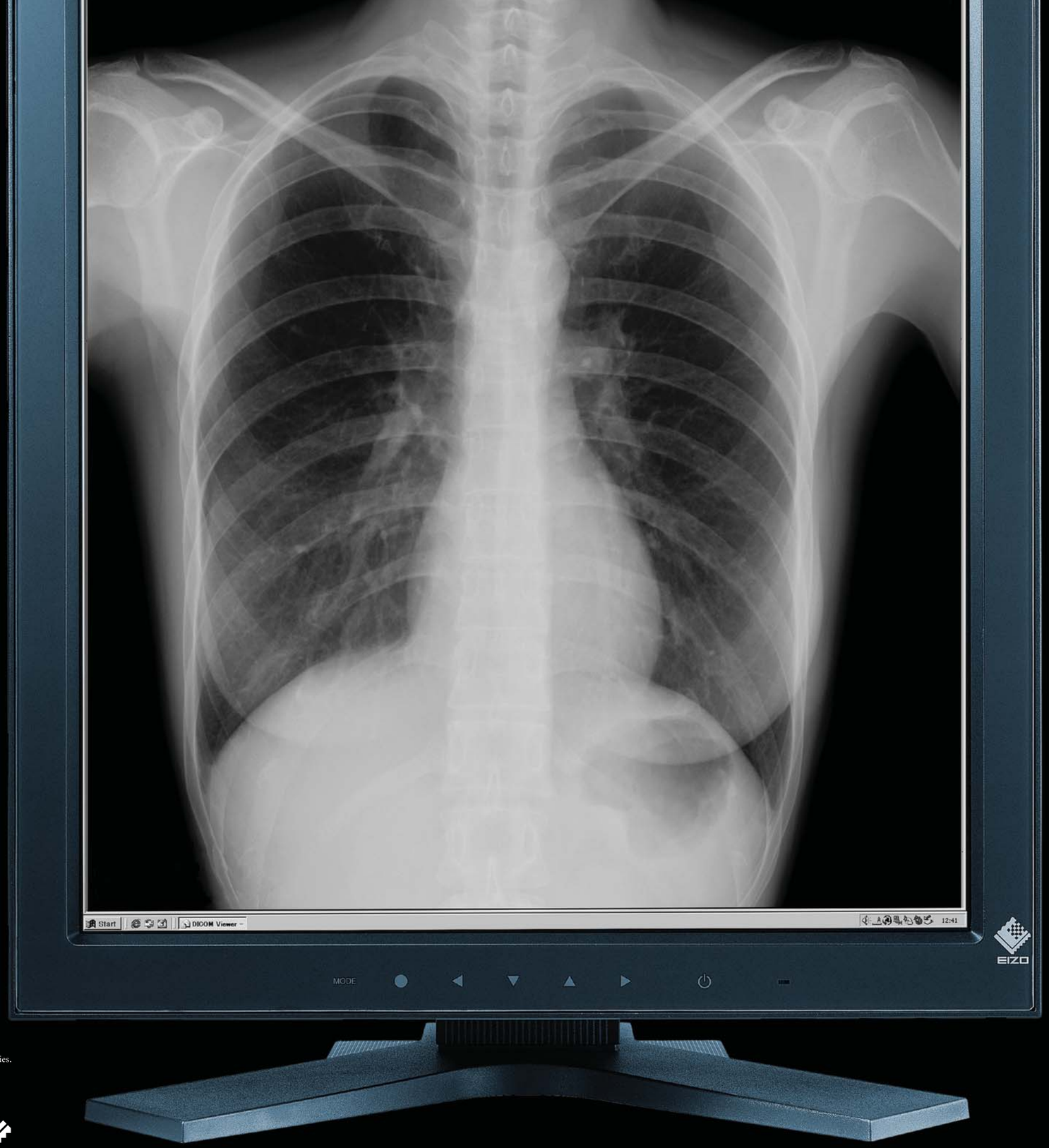

RadiForce®

Medical Monitor Solutions

Optimum Image, Same Image.

EIZO NANAO CORPORATION

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radiforce.com

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Optimum Image, Same Image.

RadiForce®

Worldwide, more and more hospitals and other health care institutions are rapidly moving towards a filmless environment.

In line with this trend, medical image display monitors are becoming increasingly important.
In addition to delivering precise, stable image display, hospital demands for monitors now include unified image display between multiple monitors, management of a huge volume of information, and common access to in-house data. As a specialist monitor maker applying know-how gleaned from years of experience, EIZO has gained the highest praise for supplying a wide range of solutions such as product quality support compliant with unified international standards, and the unification of quality control with comprehensive hospital networks.

EIZO®

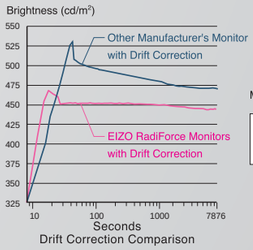
RadiForce® Medical Monitor Solutions

Features shared by all EIZO's RadiForce monitors address common technical issues like connectivity and image consistency, as well as design considerations focusing on comfort and ease of use.

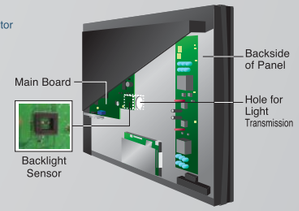
Brightness Stabilization

At startup or upon wakeup, the EIZO patented drift correction function quickly stabilizes the brightness level. In addition, a sensor measures the backlight brightness and compensates for brightness fluctuations caused by the ambient temperature and the passage of time.

This brightness stabilization function is EIZO patented technology (Japan patent numbers 3171808 and 3193315, US patent number 6188380).

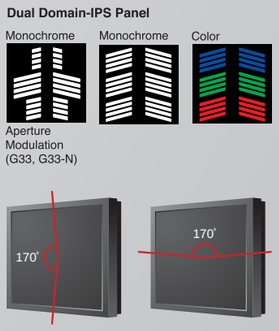


Drift Correction Comparison



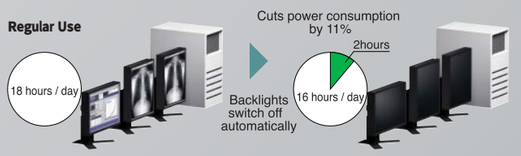
Advanced LCD Panels

All RadiForce models use the most advanced ASV and Dual Domain-IPS/Super-IPS LCD panels. Each liquid crystal molecule has four optical directivities, producing 170° viewing angles and minimizing changes in color when the screen is viewed from different directions. With aperture modulation technology, a different area ratio for each sub-pixel is displayed, providing a higher number of grayscale tones.



Backlight Saver

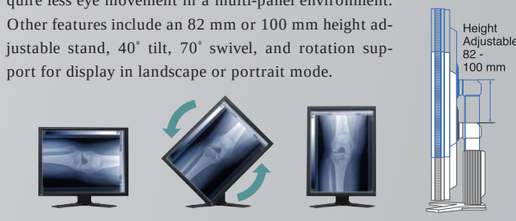
With ScreenManager Pro for Medical* utility software installed, the Backlight Saver function allows for the monitor's backlight to turn off when the Screen-Saver activates and the monitor's backlight to turn on when the computer comes out of the Screen-Saver mode. This function helps to reduce power consumption when the monitor is used for a prolonged period of time.



**Compatible with Microsoft Windows XP / 2000 operating systems. Bundled with G33, G33-N, R31, and R31-C. For other RadiForce monitors, please download from http://radiforce.com/en/downloads/software.php*

Ergonomic Design

Narrow bezels along all four sides save space and require less eye movement in a multi-panel environment. Other features include an 82 mm or 100 mm height adjustable stand, 40° tilt, 70° swivel, and rotation support for display in landscape or portrait mode.



Full 3-Year Warranty

EIZO and its authorized distributors offer a three-year limited warranty for all RadiForce monitors. The product shall be free from defects in material and workmanship for a period of three (3) years, but subject to the usage time being 20,000 hours or less from the date of purchase for monochrome monitors and 10,000 hours or less from the date of purchase for color monitors.

3 Year Warranty 3

Customer Assurance

All monitors meet strict medical, safety and EMC emissions standards including UL2601-1, TÜV/GM, CE, CB, CSA C22.2 No.601-1, VCCI, FCC, and FDA 510(k).

ISO 13485 Certification

EIZO has acquired ISO 13485 certification for its their quality management system. Approval to this standard demonstrates EIZO's ability to consistently meet customer requirements for these devices and services.

ISO 13485:2003

Quality Control Solutions

From calibration to asset management and acceptance and constancy testing, RadiCS offers complete QC management control for accurate and consistent diagnostic imaging. RadiNET Pro and RadiNET provide centralized management of monitors distributed throughout a facility, saving time and lowering costs.

Quality Control Software
RadiCS™

Network QC Management Software
RadiNET™ Pro | RadiNET™

RadiForce® Monochrome Monitors

5MP G51-BL | G51-CL

3MP G33 | G33-N | G31

2MP G22-BL | G22-CL | G21 | G20

1MP G11

SYSTEM CONFIGURATION

5MP RadiForce® G51-BL | G51-CL

Blue Base | Clear Base

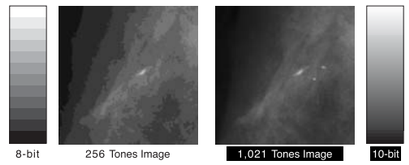
54 cm 21.3" MONOCHROME LCD MONITOR

G51-BL and G51-CL 5MP monochrome LCD monitors are designed specifically for the display of high-resolution grayscale images for digital mammography, DR and CR applications. They feature a 10-bit (1,021 tones) simultaneous grayscale display capability, offering highly refined rendering of extremely delicate grayscale shadings and high luminance.

10-Bit Simultaneous Grayscale Display

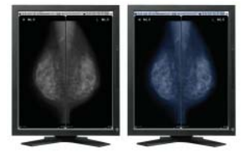
An 11.5-bit look-up table produces a palette of 3,061 grayscale tones from which 1,021 (10-bit) tones can be displayed simultaneously, ensuring highly refined rendering of even extremely delicate grayscale shadings. EIZO also offers a selection of graphics boards with 10-bit output.

10-bit graphics board and 10-bit viewer software needed for 10-bit display.



Blue Base and Clear Base Backlights

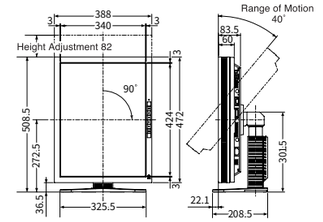
Available with either a blue base or clear base backlight.



Pairing Monitors

Effective when comparing medical images side by side, Radiologists often require multiple monitors to compare newly taken images and previous images for diagnosis. EIZO offers the same color and grayscale for two monitors bundled as a pair in one box.

■ **Dimensions** [Unit : mm]



3MP RadiForce® G33 | G33-N

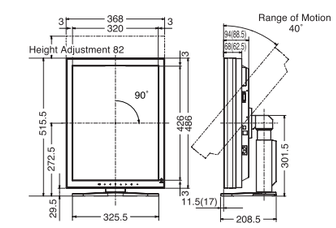
with Sensor and Panel Protector

without Sensor and Panel Protector

53 cm 20.8" MONOCHROME LCD MONITOR

G33 and G33-N are 3MP monochrome LCD monitors for accurate diagnosis in medical imaging applications, including PACS, CR, CT, MRI and angiography. They have a 13-bit look-up table that produces a palette of 8,161 grayscale tones from which 4,096 (12-bit) tones can be displayed simultaneously.

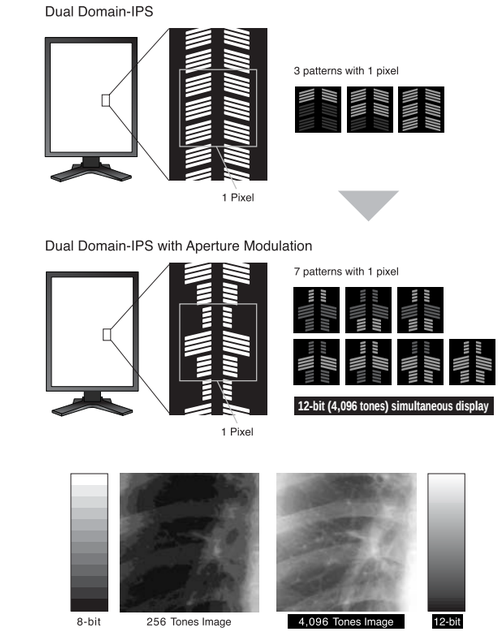
■ **Dimensions** [Unit : mm] Figure in ( ) refers to G33-N.



12-Bit Simultaneous Grayscale Display

A 13-bit look-up table produces a palette of 8,161 grayscale tones from which 4,096 (12-bit) tones can be displayed simultaneously, ensuring a highly-refined grayscale. Along with aperture modulation technology, a different area ratio for each sub-pixel is displayed; providing a higher number of grayscale tones.

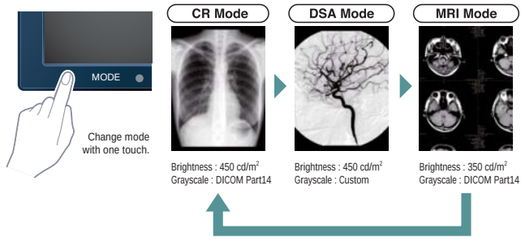
12-bit graphics board and 12-bit viewer software needed for 12-bit display.



Calibration Mode Selection

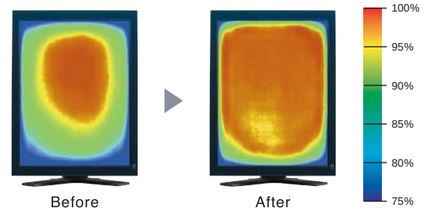
Selectable with the front panel buttons, the CAL Switch function allows for various calibration modes of specific images such as CR, CT, and endoscope images. Furthermore, with ScreenManager Pro for Medical installed, auto mode settings can be made with the Auto CAL Switch function.

[Example]



Digital Uniformity Equalizer (DUE)

Sustaining image consistency, brightness uniformity is required for medical imaging monitors. However, unified luminance of the backlight is difficult to attain due to the characteristics of LCD monitors. The Digital Uniformity Equalizer function provides optimum backlight luminance uniformity.



Built-In Swing Sensor

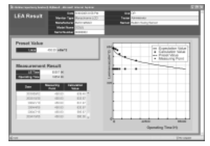
Built-In Swing Sensor

Built directly inside the upper bezel, the built-in swing sensor is completely hidden from the viewing area of the screen and is conveniently enabled and visible only when remote quality control operations are being performed, such as calibration.

compatatible with RadiCS and RadiNET Pro versions 2.00 and later.

Lifetime Expectancy Analyzer (LEA)

The Lifetime Expectancy Analyzer (LEA) function provides an estimation of the remaining backlight lifetime for the service provider. It displays the time used since the purchase date, and the expected remaining lifetime depending on how often the monitor is used and at what luminance level.



Compatible with RadiCS version 2.00 and later.

Pairing Monitors

Effective when comparing medical images side by side, Radiologists often require multiple monitors to compare newly taken images and previous images for diagnosis. EIZO offers the same color and grayscale for two monitors bundled as a pair in one box.

LCD Panel Protector

An anti-reflective panel protector is pre-attached to the monitor during production for protection against dust and scratches.

3MP RadiForce® G31

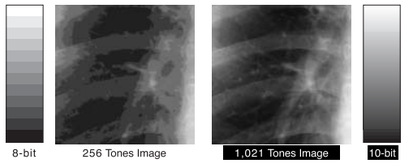
53 cm 20.8" MONOCHROME LCD MONITOR

The G31 3MP monochrome LCD monitor is designed for accurate diagnosis in medical imaging applications, including PACS, CR, CT, MRI and angiography. It has a 10-bit (1,021 tones) simultaneous grayscale display capability from a palette of 3,061 tones for high-definition medical imaging.

10-Bit Simultaneous Grayscale Display

An 11.5-bit look-up table produces a palette of 3,061 grayscale tones from which 1,021 (10-bit) tones can be displayed simultaneously, ensuring highly refined rendering of even extremely delicate grayscale shadings. EIZO also offers a selection of graphics boards with 10-bit

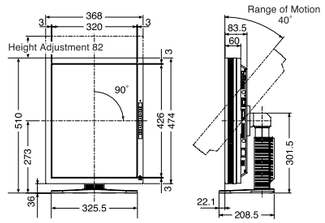
10-bit graphics board and 10-bit viewer software needed for 10-bit display.



Pairing Monitors

Effective when comparing medical images side by side, Radiologists often require multiple monitors to compare newly taken images and previous images for diagnosis. EIZO offers the same color and grayscale for two monitors bundled as a pair in one box.

■ **Dimensions** [Unit : mm]



2MP RadiForce® G22-BL | G22-CL

Blue Base | Clear Base

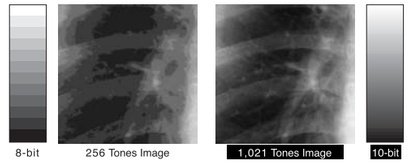
50 cm 19.6" MONOCHROME LCD MONITOR

Both the G22-BL and G22-CL monitors are ideal for accurate diagnosis in medical imaging applications, including PACS, chest radiology, CT, MRI and angiography images. These 2MP (1200 x 1600) monochrome LCD monitors boast a 10-bit (1,021 tones) simultaneous grayscale display capability.

10-Bit Simultaneous Grayscale Display

An 11.5-bit look-up table produces a palette of 3,061 grayscale tones from which 1,021 (10-bit) tones can be displayed simultaneously, ensuring highly refined rendering of even extremely delicate grayscale shadings. EIZO also offers a selection of graphics boards with 10-bit

10-bit graphics board and 10-bit viewer software needed for 10-bit display.



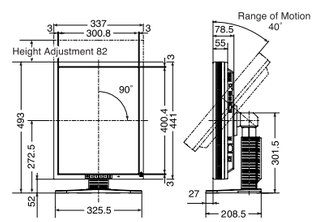
Blue Base and Clear Base Backlights

Available with either a blue base or clear base backlight.

Pairing Monitors

Effective when comparing medical images side by side, Radiologists often require multiple monitors to compare newly taken images and previous images for diagnosis. EIZO offers the same color and grayscale for two monitors bundled as a pair in one box.

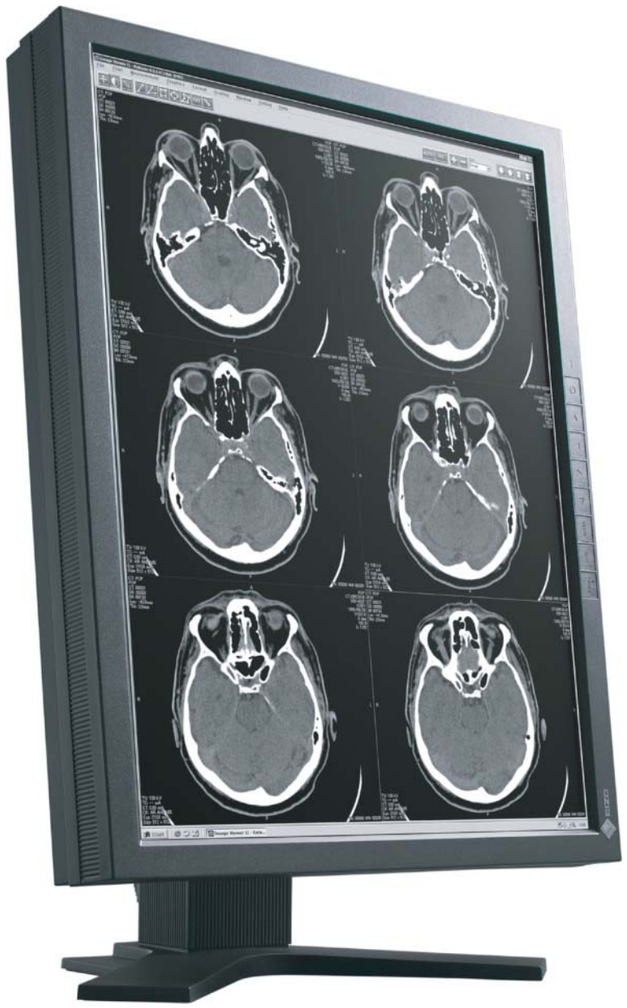
■ **Dimensions** [Unit : mm]



2MP RadiForce® G21

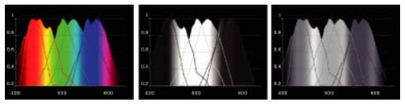
51 cm 20.1" MONOCHROME LCD MONITOR

The G21 is the optimum choice for accurate diagnosis in medical imaging applications, including PACS, chest radiology, CT, MRI, and angiography images. This 2MP (1200 x 1600) monochrome LCD monitor features a 10-bit (1,021 tones) simultaneous grayscale display capability with digital and analog input terminals.



Color-Grayscale Conversion

When receiving an RGB signal from a color analog graphics board, the conversion function accurately reproduces the original color brightness differences in grayscale.

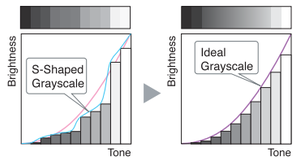


Original | Standard Display | EIZO Color-Grayscale Conversion

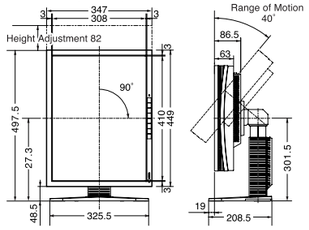
RadiForce® G21 | G20 COMMON FEATURES

1,531 Tone Grayscale Palette

A 10.5-bit look-up table produces a palette of 1,531 grayscale tones, from which 256 tones can be displayed simultaneously, ensuring highly refined rendering of even extremely delicate gradations.



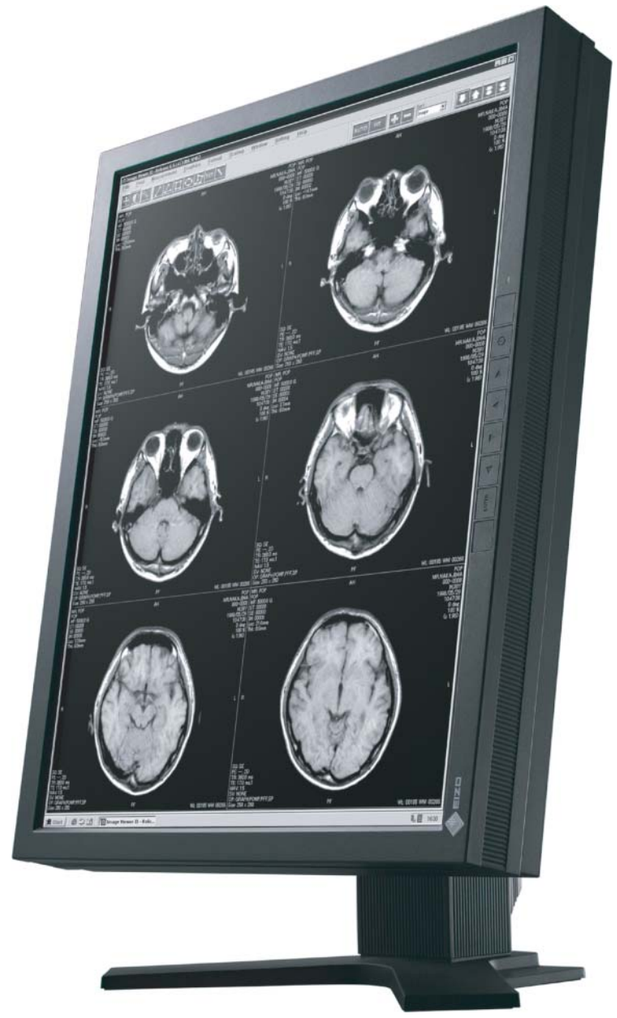
■ **Dimensions** [Unit : mm]



2MP RadiForce® G20

51 cm 20.1" MONOCHROME LCD MONITOR

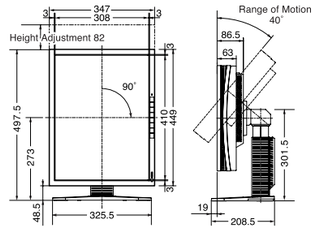
The G20 is ideally suited for accurate diagnosis in medical imaging applications, including PACS, chest radiology, CT, MRI, and angiography images. This 2MP (1200 x 1600) monochrome LCD monitor offers a 10-bit (1,021 tones) simultaneous grayscale display capability with a digital input terminal.



Pairing Monitors

Effective when comparing medical images side by side, Radiologists often require multiple monitors to compare newly taken images and previous images for diagnosis. EIZO offers the same color and grayscale for two monitors bundled as a pair in one box.

■ **Dimensions** [Unit : mm]



1MP RadiForce® G11

46 cm 18.1" MONOCHROME LCD MONITOR

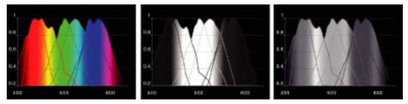
The G11 is ideal for referral imaging in a distributed PACS environment, and review of CT and MRI images. This 1MP (1280 x 1024) monochrome LCD monitor features a palette of 1,531 grayscale tones, from which 256 tones can be displayed simultaneously.

1,531 Tone Grayscale Palette

A 10.5-bit look-up table produces a palette of 1,531 grayscale tones, from which 256 tones can be displayed simultaneously, ensuring highly refined rendering of even extremely delicate gradations.

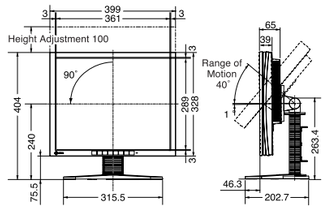
Color-Grayscale Conversion

When receiving an RGB signal from a color analog graphics board, a conversion function accurately reproduces the original color brightness differences in grayscale.



Original | Standard Display | EIZO Color-Grayscale Conversion

■ **Dimensions** [Unit : mm]



RadiForce® Color Monitors

3MP R31 | R31-C

2MP R22

1MP R12

SYSTEM CONFIGURATION

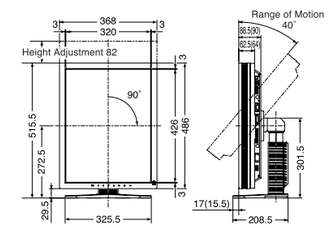
3MP RadiForce® R31 | R31-C

with Panel Protector | without Panel Protector

53cm 20.8" COLOR LCD MONITOR

R31 and R31-C 3MP color LCD monitors offer high resolution and high luminance for accurate display of color and grayscale MRI, PET and CR images. Ideal for 3D color rendering and image fusion display.

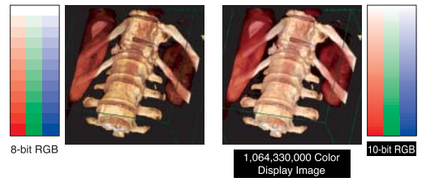
■ **Dimensions** [Unit : mm] Figure in ( ) refers to R31-C.



10-bit Color Input Support

Each color (RGB) is supported with a 10-bit input compatibility that displays up-to 1,064,330,000 colors, providing highly-crisp resolution for 3D color rendering and image fusion.

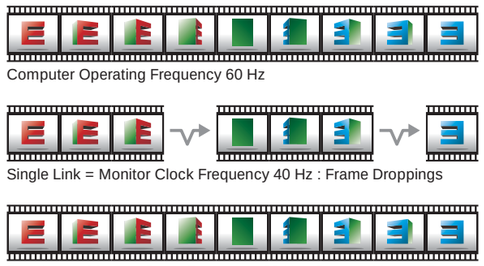
10-bit color graphics board and 10-bit color viewer software needed for 10-bit color display.



Dual Link Input Support

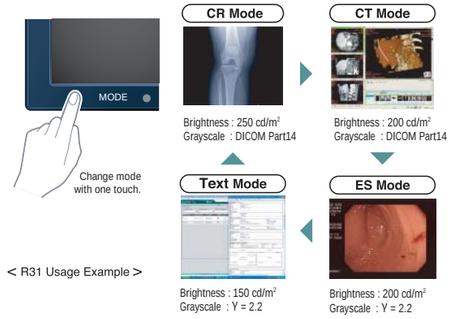
With dual link input support, monitors achieved a clock frequency of 60 Hz even when displaying QXGA (1536 x 2048) resolution. This enables frame synchronization between the computer and the monitor, which reproduces a smooth moving picture without any dropping of frames.

Graphics board with dual link compatibility reguired.



Calibration Mode Selection

Selectable with the front panel buttons, the CAL Switch function allows for various calibration modes of different modalities such as CR, CT, and endoscope images. Furthermore, with ScreenManager Pro for Medical installed, auto mode settings can be made with the Auto CAL Switch function.



Lifetime Expectancy Analyzer (LEA)

The Lifetime Expectancy Analyzer (LEA) function provides an estimation of the remaining backlight lifetime for the service provider. It displays the time used since the purchase date, and the expected remaining lifetime depending on how often the monitor is used and at what luminance level.

Compatible with RadiCS version 2.00 and later.

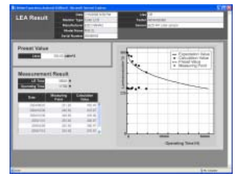
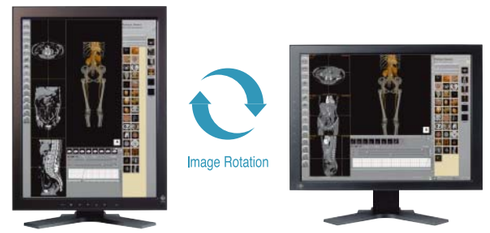


Image Rotation

The Image Rotation function offers easy switching between portrait and landscape mode, which eliminates the need for special software. Since it is hardware rather than software, you don't lose drawing speed or system stability.



Independent Image Setting (IIS)

With ScreenManager Pro for Medical installed, the Independent Image Setting (IIS) function allows for any specific area of an image to be adjusted and pre-set to various grayscale gradations and luminance levels.

LCD Panel Protector

An anti-reflective panel protector is pre-attached to the monitor during production for protection against dust and scratches.

2MP RadiForce® R22

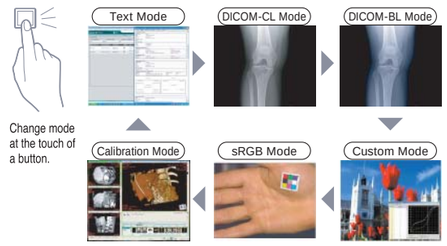
54 cm 21.3" COLOR LCD MONITOR

The R22 2MP color LCD monitor offers accurate display of color and grayscale gradations for MRI, PET, CR images and 3D rendering.

RadiForce® R22 | R12 COMMON FEATURES

FineContrast and DICOM Settings

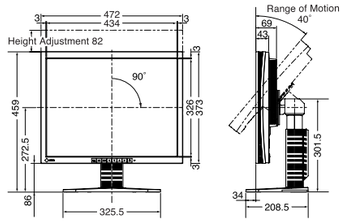
The front button operated FineContrast function consists of six user-selectable modes, each with different settings for brightness and gamma. It includes two DICOM modes - DICOM-CL and DICOM-BL for clear and blue base film, as well as Custom, sRGB, Calibration, and Text modes.



Automatic Mode Switching

For further convenience, FineContrast modes can be assigned to any application with the bundled ScreenManager Pro for LCD (for Microsoft Windows XP, 2000, Me and 98SE) utility software. When the application is opened, the screen automatically changes to its assigned mode.

■ **Dimensions** [Unit : mm]



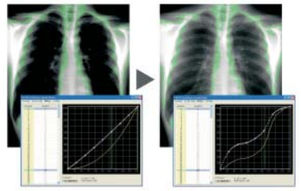
1MP RadiForce® R12

48.1cm 19" COLOR LCD MONITOR

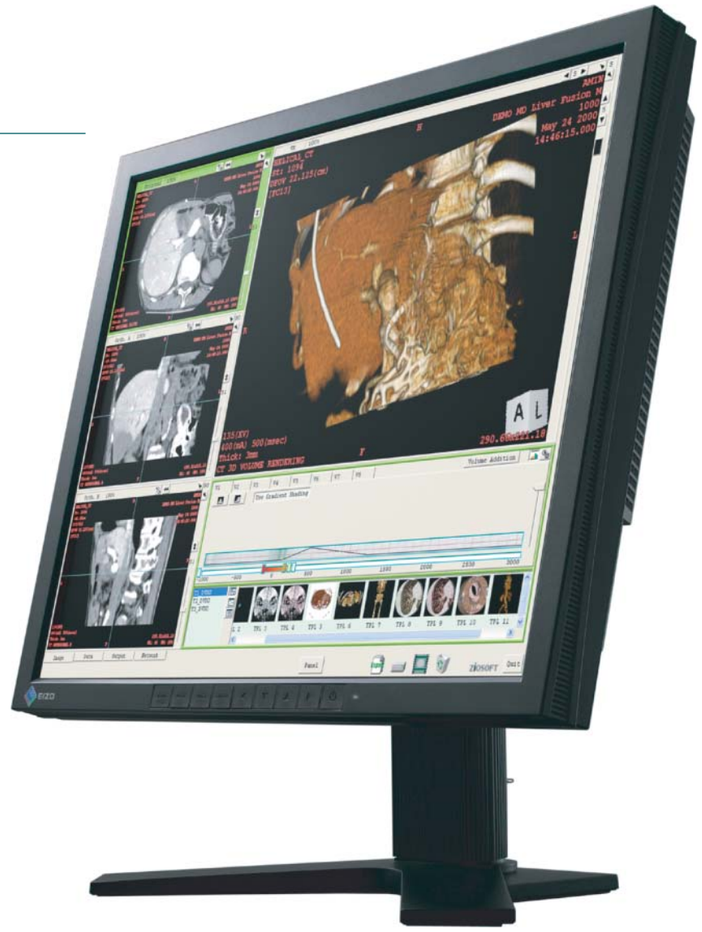
The R12 features versatile image control and landscape/ portrait mode support, making this 1MP color LCD monitor ideal for a wide variety of tasks, from viewing of ultrasound, endoscope, CT and MRI images to use as an HIS/RIS terminal.

ToneCurve Tuning Utility

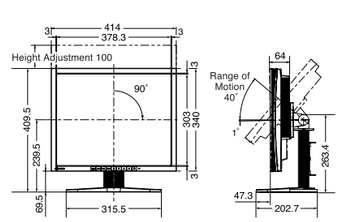
The EIZO-developed bundled software ToneCurve Tuning Utility (for Microsoft Windows XP, 2000, Me and 98SE) uses the monitor's 10-bit look-up tables (LUT) for adjustment of grayscale and color tones to the desired values. Even tones in high and low brightness areas of the screen, typically problematic for LCD monitors to display, can be adjusted easily and accurately.



Input values into the table or manipulate control points on the graph (number of control points are user selectable — 3, 5, 9, 16, 24, 33, or 256).



■ **Dimensions** [Unit : mm]



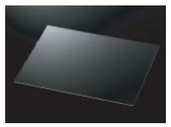
RadiForce® Graphics Board Compatibility

**Support for dual monitor configurations with the bundled cable.*

	5MP		3MP				2MP				
	MED5mp-PPP	VREngine/SMD5-PCI	MED3mp-PPP	VREngine/SMD3-DUL	VREngine/SMD3-PCI	VREngine/MD3W	MED2mp-PPP	MED2mp-PCI	VREngine/SMD2-PCI	VREngine/MD2W	RAD-PCI
											
Bit	10-bit / 8-bit	10-bit / 8-bit	10-bit / 8-bit	10-bit / 8-bit	12-bit / 10-bit / 8-bit	8-bit	10-bit / 8-bit	8-bit	10-bit / 8-bit	8-bit	8-bit
Compatible Operating System	Microsoft Windows XP / 2000 / NT4.0 (SP6 or later)	Microsoft Windows XP / 2000	Microsoft Windows XP / 2000 / NT4.0 (SP6 or later)	Microsoft Windows XP / 2000 Professional	Microsoft Windows XP / 2000	Microsoft Windows XP / 2000 Professional / NT4.0 (SP6 or later)	Microsoft WindowsXP / 2000	Microsoft Windows XP / 2000 / NT4.0 (SP6 or later)	Microsoft WindowsXP / 2000	Microsoft WindowsXP / 2000 Professional / NT4.0	Microsoft Windows XP / 2000 Professional
Frame Buffer Memory	256 MB	128 MB	256 MB	128 MB	128 MB	64 MB	256 MB	256 MB	128 MB	64 MB	128 MB
Bus Interface	PCI 32-bit (33 MHz) / 64-bit (66 MHz)	PCI 32-bit (33 MHz / 66 MHz)	PCI 32-bit (33 MHz) / 64-bit (66 MHz)	PCI 32-bit (33 MHz / 66 MHz)	PCI 32-bit (33 MHz / 66 MHz)	PCI 32-bit (33 MHz)	PCI 32-bit (33 MHz) / 64-bit (66 MHz)	PCI 32-bit (33 MHz) / 64-bit (66 MHz)	PCI 32-bit (33 MHz / 66 MHz)	PCI 32-bit (33 MHz)	PCI 32-bit(33 MHz / 66 MHz)
Display Resolutions (Portrait Mode)	Single Head : Up To 2048 x 2560 Dual Head : Up To 4096 x 2560	Single Head : Up To 2048 x 2560 Dual Head : Up To 4096 x 2560	Single Head : Up To 1536 x 2048 Dual Head : Up To 3072 x 2048	Single Head : 1536 x 2048 Dual Head : 3072 x 2048	Single Head : Up To 1536 x 2048 Dual Head : Up To 3072 x 2048	Single Head : 1536 x 2048 Dual Head : 3072 x 2048	Single Head : Up To 1200 x 1600 Dual Head : Up To 2400 x 1600	Single Head : Up To 1200 x 1600 Dual Head : Up To 2400 x 1600	Single Head : Up To 1200 x 1600 Dual Head : Up To 2400 x 1600	Single Head : Up To 1200 x 1600 Dual Head : Up To 2400 x 1600	Single Head : Up To 1200 x 1600 Dual Head : Up To 2400 x 1600
Dot Clock	Up To 148 MHz	148 MHz	130 MHz	214.25 MHz	130 MHz	130 MHz	162 MHz	162 MHz	162 MHz	161.9 or 132.5 MHz	162 MHz
Scanning Frequency (H,V)	103.9 kHz 50 Hz	103.9 kHz 50 Hz (when displaying 5 MP)	96.72 kHz 60 Hz	126.3 kHz (3 MP Dual Link) 60 Hz (3 MP Dual Link)	96.7 kHz 60 Hz (when displaying 3 MP)	96.72 kHz 60 Hz	75 kHz 60 Hz	75 kHz 60 Hz	75 kHz 60 Hz	75 kHz 60 Hz	75k Hz 60 Hz
Maximum Power Consumption	40 W	16.8 W	40 W	16.8 W	16.8 W	15 W	40 W	40 W	16.8 W	15 W	14.5 W
Output Terminals	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-I x 2	DVI-D x 2	DVI-D x 2*
Dimensions (W x H)	190.5 x 98.4 mm	174.5 x 106.7 mm	190.5 x 98.4 mm	174.5 x 106.7 mm	174.5 x 106.7 mm	174.5 x 106.7 mm	190.5 x 98.4 mm	190.5 x 98.4 mm	174.5 x 106.7 mm	174.5 x 106.7 mm	167.6 x 64.5 mm
12-Bit Monochrome Monitor System											
G33 | G33-N					●						
10-Bit Monochrome Monitor System											
G51-BL | G51-CL	●	●									
G33 | G33-N	○	○	●		●						
G31	○	○	●		●						
G22-BL | G22-CL							●		●		
8-Bit Monochrome Monitor System											
G51-BL | G51-CL	●	●									
G33 | G33-N	○	○	●		○	●					
G31	○	○	●		○	●					
G22-BL | G22-CL	○	○	○		○		○	●	○	●	●
G21	○	○	○		○		○	●	○	●	●
G20	○	○	○		○		○	●	○	●	●
G11	○	○	○		○		○	●	○	●	●
Color Monitor System											
R31 | R31-C	○	○	●	●	○						○
R22	○	○	○		○		○	●	○	●	●
R12	○	○	○		○		○	●	○	●	●

● Recommended ○ Compatible

RadiForce® Accessory Compatibility

	Flexible Arm		Wall Mount Arm				Dual Height Adjustable Stand		Panel Protector	
	LA-131-D		LA-030-W		LA-011-W		LS-HM1-D		PANEL PROTECTOR	
										
Available Colors	Black, Gray		Available Colors	Black, Gray	Available Colors	Black	Available Colors	Black, Gray	Surface Treatment	Anti-reflective coating (both sides)
Mounting Desk Requirements	Thickness : 25 - 60 mm Depth : 50 mm min. Weight : 60 kg min.		Mounting Wall Requirements	130 kg minimum	Mounting Wall Requirements	130 kg minimum	Height Adjustable Range	75 mm , 6stages (0 / 15 / 30 / 45 / 60 / 75 mm)	Panel Materials	Acrylic
									Coating Strength	5 H
Load Capacity	4 - 8 kg		Load Capacity	4 - 8 kg	Load Capacity	4 - 8 kg	Horizontal Slide Range	80 mm maximum	Light Transmission	More than 99 % (RP-902,RP901 : More than 95 %)
Pivot	90˚		Pivot	90˚	Pivot	——	Pivot	90˚		
Tilt Angle	Monitor : 35˚ Up, 0˚ Down, Middle : 105˚		Tilt Angle	Monitor: 35˚ Up, 0˚ Down	Tilt Angle	35˚ Up, 0˚ Down	Tilt Angle	40˚ Up, 0˚ Down	Reflectivity	Less than 1 %
Swivel Angle	Monitor : 90˚ Right, 90˚ Left Middle : 180˚ Right, 180˚ Left Wall Anchore : 150˚ Right , 150˚ Left		Swivel Angle	Monitor : 90˚ Right, 90˚ Left Middle : 180˚ Right, 180˚ Left Wall Anchore : 90° Right , 90° Left	Swivel Angle	90˚ Right, 90˚ Left	Swivel Angle	5˚ Right, 5˚ Left		
Dimensions (W x H x D)	150 x 220.5 - 472.2 x 445.2 - 645.2 mm		Dimensions (W x H x D)	109 x 271.4 x 513 mm	Dimensions (W x H x D)	109 x 172.1 x 113 mm	Dimensions (W x H x D)	604 x 326 - 401 x 212 mm		
Weight	4.8 kg		Weight	2.8 kg	Weight	1.4 kg	Weight	6.8 kg		
Hole Spacing	100 x 100 mm		Hole Spacing	100 x 100 mm	Hole Spacing	100 x 100 mm	Hole Spacing	100 x 100 mm		
Monochrome Monitor										
G51-BL | G51-CL	○		○		○		○		RP-901	
G33	○		○		○		——		Bundled with Panel Protector	
G33-N	○		○		○		——		——	
G31	○		○		○		○		RP-802	
G22-BL | G22-CL	○		○		○		○		RP-702	
G21	○		○		○		○		RP-801	
G20	○		○		○		○			
G11	○		○		○		○		RP-901	
Color Monitor										
R31	○		○		○		——		——	
R31-C	○		○		○		——		Bundled with Panel Protector	
R22	○		○		○		○		RP-902	
R12	○		○		○		○		RP-701	

Monitor Cleaning Kit

ScreenCleaner™

BNC Adaptor

RadiForce® BNC Adaptor BI00FM

Connector	DVI-I (29 pin),5BNC
Compatible Monitor	RadiForce G11

RadiForce® Quality Control Solutions

If the monitor is not reproducing accurate images, can you really be sure that the diagnosis will be accurate?

The QC (Quality Control) of LCD monitors for medical imaging is vital for medical professionals that rely on the quality of their monitor's performance for their diagnosis decisions.

It's a fact that in the filmless environment of medical imaging, monitors have discrepancies in image reproduction, such as resolution variations from one monitor to another and luminance instabilities. Furthermore, image reproduction fidelity on a monitor can deteriorate over time. Thus, complete monitor QC is essential to ensure consistency in quality diagnosis.
Based on experience and know-how cultivated over many years of producing monitors, EIZO answers the demands of healthcare and IT professionals who are engaged in medical imaging with the highest-quality of QC-related solutions – from management tools compliant with AAPM, DIN, JESRA and IEC standards to an advanced network QC management software.

Quality Control Software

RadiCS™ Client

- Precise Calibration
- Acceptance and Constancy Testing
- QC Data Records
- Self-Calibration and Self-Diagnosis
- Asset Management

▶ User-Friendly Interface

Network QC Management Software

RadiNET™ Pro Administrator

- Manages 8,000 Monitors
- Flexible Compatibility
- Remote Functions
- Alert Warning Messages
- Web-Based Application
- Integrated Management
- Report Function
- Secured Log Function

▶ User-Friendly Interface

■ **QC Referrence and Report Function**

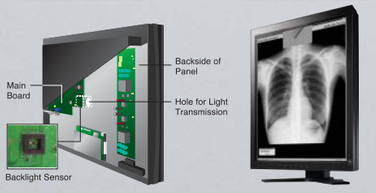
Network QC Management Software

RadiNET™ Administrator

▶ Enhanced Report Function

■ **Choice of Sensors to Fit Your QC Management Requirements**

Backlight Sensor — RadiForce Monitors — **Built-In** — Built-In Swing Sensor G33



GX2･RX1 Sensor — RadiForce Monitors — **External** — Clip-On Swing Sensor — RadiForce Monochrome Monitors

Clip-On Swing Sensor G1

Ensure stable and consistent display among current RadiForce monochrome monitors.

- Attachable to the monitor bezel with a USB connector
- Calibration to the DICOM Part 14 standard
- Remote calibration with RadiNET Pro version 2.00 and later

Large-Scale Network Hospital

Limited-Scale Network Hospital

RadiForce® Monitor Specifications

5MP

G51-BL | G51-CL

54 cm (21.3")
Monochrome LCD Monitor

3MP

G33 | G33-N

53 cm (20.8")
Monochrome LCD Monitor

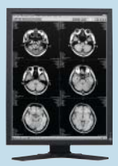
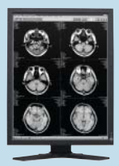
3MP

G31

53 cm (20.8")
Monochrome LCD Monitor

Cabinet Color	Black	Black	Black
Panel	54 cm (21.3")TFT Monochrome LCD Panel (Dual Domain - IPS)	53 cm (20.8") TFT Monochrome LCD Panel (Dual Domain - IPS / Aperture Modulation)	53 cm (20.8") TFT Monochrome LCD Panel (Dual Domain - IPS)
Active Display Size (H x V)	338 x 422 mm	318 x 424 mm	318 x 424 mm
Viewable Image Size	Diagonal : 540 mm	Diagonal : 529 mm	Diagonal : 529 mm
Native Resolution (Portrait Mode)	2048 x 2560	1536 x 2048	1536 x 2048
Pixel Pitch	0.165 x 0.165 mm	0.207 x 0.207 mm	0.207 x 0.207 mm
Grayscale Tones	1,024 from a palette of 3,061	4,096 from a palette of 8,161	1,024 from a palette of 3,061
Viewing Angles (H,V)	170˚ / 170˚	170˚ / 170˚	170˚ / 170˚
Brightness	700 cd/m² (typical)	700 cd/m² (typical)	700 cd/m² (typical)
Recommended Brightness for Calibration	450 cd/m²	450 cd/m²	450 cd/m²
Contrast Ratio	800 : 1	700 : 1	900 : 1
Response Time	100 ms (typical)	50 ms (typical)	50 ms (typical)
Scanning Frequency (H,V)	99.9 - 107.9 kHz,50 + /-3 Hz Frame synchronous mode with compatible graphics board	31 - 100 kHz, 48 - 71.5 Hz (VGA Text : 69 - 71 Hz) Frame synchronous mode : 59 - 61 Hz	92.86 - 96.72 kHz, 60 Hz Frame synchronous mode with compatible graphics board
Dot Clock	142 - 152 MHz	165 MHz	132 MHz
Input Signals	DVI Standard 1.0	DVI Standard 1.0	DVI Standard 1.0
Sync Formats			
Input Terminal	DVI-D 24 pin	DVI-D 24 pin	DVI-D 24 pin
USB Ports	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream
USB Standard	USB Standard Rev. 1.1	Standard Rev. 2.0	Standard Rev. 1.1
Plug & Play	VESA DDC 2B	VESA DDC 2B	VESA DDC 2B
Power Requirements	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz
Power Consumption	85 W	100 W	85 W
Power Save Mode	Less than 6 W	Less than 3 W	Less than 6 W
Built-In Sensor	Backlight Sensor	Built-In Swing Sensor / Backlight Sensor	Backlight Sensor
Power Management	DVI DMPM	DVI DMPM	DVI DMPM
OSD Languages	English, Japanese	English, Japanese	English, Japanese
Height Adjustment Range	82 mm	82 mm	82 mm
Pivot	90˚	90˚	90˚
Tilt / Swivel	40˚ Up, 0˚ Down / 35˚ Right, 35˚ Left	40˚ Up, 0˚ Down / 35˚ Right, 35˚ Left	40˚ Up, 0˚ Down / 35˚ Right, 35˚ Left
Dimensions (W x H x D)	With Stand : 388 x 508.5 - 590.5 x 208.5 mm Without Stand : 388 x 472 x 83.5 mm	With Stand : 368 x 515.5 - 597.5 x 208.5 mm Without Stand : G33 368 x 486 x 94 mm / G33-N 368 x 486 x 88.5 mm	With Stand : 368 x 510 - 592 x 208.5 mm Without Stand : 368 x 474 x 83.5 mm
Net Weight	With Stand : 9.5 kg Without Stand : 6.3 kg	With Stand : G33 10.0 kg / G33-N 9.2 kg Without Stand : G33 7.0 kg / G33-N 6.2 kg	With Stand : 9.5 kg Without Stand : 6.3 kg
Hole Spacing	VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)
Certifications and Standards	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, Canadian ICES-003-A, FDA 510(k) for Mammography and General Radiography, CCC, EIZO Eco Products 2002	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-B, FCC-B, Canadian ICES-003-B, FDA 510(k), CCC, EIZO Eco Products 2002	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, Canadian ICES-003-A, FDA 510(k), CCC, EIZO Eco Products 2002
Supplied Accessories	AC power cord, user's manual, signal cable (DVI-D~DVI-D), USB cable, warranty registration card	AC power cord, user's manual, signal cable (DVI-D~DVI-D), USB cable, EIZO LCD Utility Disk (ScreenManager Pro for Medical software), warranty registration card	AC power cord, user's manual, signal cable (DVI-D~DVI-D), USB cable, warranty registration card

RadiForce® Monochrome·Color Monitors

								
2MP G22-BL | G22-CL 50 cm (19.6") Monochrome LCD Monitor	2MP G21 51 cm (20.1") Monochrome LCD Monitor	2MP G20 51 cm (20.1") Monochrome LCD Monitor	1MP G11 46 cm (18.1") Monochrome LCD Monitor	3MP R31 | R31-C 53 cm (20.8") Color LCD Monitor	2MP R22 54 cm (21.3") Color LCD Monitor	1MP R12 48.1 cm (19") Color LCD Monitor		
Black	Black	Black	Black	Black	Black, Gray	Black, Gray		Cabinet Color
50 cm (19.6") TFT Monochrome LCD Panel (Dual Domain - IPS)	51 cm (20.1") TFT Monochrome LCD Panel (ASV)	51 cm (20.1") TFT Monochrome LCD Panel (ASV)	46 cm (18.1") TFT Monochrome LCD Panel (Dual Domain - IPS)	53 cm (20.8") TFT Color LCD Panel (Dual Domain - IPS)	54 cm (21.3") TFT Color LCD Panel (Super - IPS)	48 cm (19") TFT Color LCD Panel (Dual Domain - IPS)		Panel
398 x 299 mm	408 x 306 mm	408 x 306 mm	359 x 287 mm	318 x 424 mm	432 x 324 mm	376 x 301 mm		Active Display Size (H x V)
Diagonal : 498 mm	Diagonal : 510 mm	Diagonal : 510 mm	Diagonal : 459 mm	Diagonal : 529 mm	Diagonal : 540 mm	Diagonal : 481 mm		Viewable Image Size
1200 x 1600	1200 x 1600	1200 x 1600	1024 x 1280	2048 x 1536 (landscape)	1600 x 1200	1280 x 1024		Native Resolution (Landscape Mode)
0.249 x 0.249 mm	0.255 x 0.255 mm	0.255 x 0.255 mm	0.2805 x 0.2805 mm	0.207 x 0.207 mm	0.270 x 0.270 mm	0.294 x 0.294 mm		Pixel Pitch
1,024 from a palette of 3,061	256 from a palette of 1,531	256 from a palette of 1,531	256 from a palette of 1,531	10 - bit : 1.06 billion (maximum) 8 - bit : 16.77 million from a palette of 1.06 billion	16.77 million from a palette of 1.06 billion	16.77 million from a palette of 1.06 billion		Display Colors
170° / 170°	170° / 170°	170° / 170°	170° / 170°	170° / 170°	170° / 170°	170° / 170°		Viewing Angles (H,V)
800 cd/m² (typical)	700 cd/m² (typical)	700 cd/m² (typical)	700 cd/m² (typical)	R31 : 400 cd/m² / R31 - C:350 cd/m²	250 cd/m² (typical)	270 cd/m² (typical)		Brightness
500 cd/m²	400 cd/m²	400 cd/m²	400 cd/m²	R31 : 250 cd/m² / R31 - C:220 cd/m²	150 cd/m²	160 cd/m²		Recommended Brightness for Calibration
850 : 1	1000 : 1	1000 : 1	600 : 1	400 : 1	550 : 1	450 : 1		Contrast Ratio
50ms (typical)	30 ms (typical)	30 ms (typical)	40 ms (typical)	50 ms (typical)	30 ms (typical)	20 ms (typical)		Response Time
75 kHz, 60 Hz Frame synchronous mode with compatible graphics board	Analog : 31.5 - 130 kHz, 50 - 85 Hz Digital : 31.5 - 75 kHz, 60 Hz (VGA Text : 70 Hz) Frame synchronous mode with compatible graphics board	31.5 - 75 kHz, 60 Hz (VGA Text : 70 Hz) Frame synchronous mode with compatible graphics board	Analog : 27 - 82 kHz, 50 - 85 Hz (1280 x 1024 : 50 - 75 Hz) Digital : 27 - 64 kHz, 60 Hz (VGA Text : 70 Hz) Frame synchronous mode with compatible graphics board	31 - 127 kHz, 59 - 61 Hz (VGA Text : 69 - 71 Hz, QXGA : 36 - 61 Hz) Frame synchronous mode : 59 - 61 Hz	Analog : 31 - 94 kHz, 49 - 86 Hz (1600 x 1200 : 76 Hz) Digital : 31 - 76 kHz, 59 - 61 Hz (VGA Text : 69 - 71 Hz) Frame synchronous mode : 59 - 61 Hz	Analog : 30 - 82 kHz, 49 - 86 Hz (1280 x 1024 : 50 - 75 Hz) Digital : 30 - 65 kHz, 59 - 61 Hz (VGA Text : 69 - 71 Hz) Frame synchronous mode : 57.5 - 62 Hz		Scanning Frequency (H,V)
165 MHz	Analog : 240 MHz / Digital : 162 MHz	162 MHz	Analog : 135 MHz / Digital : 108 MHz	215 MHz	Analog : 202.5 MHz / Digital : 162 MHz	Analog : 135 MHz / Digital : 108 MHz		Dot Clock
DVI Standard 1.0	Analog : RGB Analog / Digital : DVI Standard 1.0 Separate, Composite, Sync-on-Green	DVI Standard 1.0	Analog : RGB Analog / Digital : DVI Standard 1.0 Separate, Composite, Sync-on-Green	DVI Standard 1.0	Analog : RGB Analog / Digital : DVI Standard 1.0 Separate, Composite, Sync-on-Green	Analog : RGB Analog / Digital : DVI Standard 1.0 Separate, Composite, Sync-on-Green		Input Signals Sync Formats
DVI-D 24 pin	DVI-I 29 pin, BNC x 3 (switchable)	DVI-D 24 pin	DVI-I 29 pin, BNC[1]	DVI-D 24 pin	D-Sub mini 15 pin, DVI-I 29 pin (switchable)	DVI-I 29 pin x 2 (switchable)		Input Terminal
1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream		USB Ports
Standard Rev. 2.0	Standard Rev. 1.1	Standard Rev. 1.1	Standard Rev. 1.1	Standard Rev. 2.0	Standard Rev. 2.0	Standard Rev. 2.0		USB Standard
VESA DDC 2B	VESA DDC 2B	VESA DDC 2B	VESA DDC 2B	VESA DDC 2B	VESA DDC 2B	VESA DDC 2B		Plug & Play
AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz	AC100 - 120 V, 200 - 240 V : 50 / 60 Hz		Power Requirements
85 W	70 W	65 W	60 W	110 W	70 W	60 W		Power Consumption
Less than 6 W	Less than 8 W	Less than 8 W	Less than 8 W	Less than 3 W	Less than 8 W	Less than 8 W		Power Save Mode
Backlight Sensor	Backlight Sensor	Backlight Sensor	Backlight Sensor	Backlight Sensor	Backlight Sensor	Backlight Sensor		Built-In Sensor
DVI DMPM	Analog : VESA DPMS / Digital : DVI DMPM	DVI DMPM	Analog : VESA DPMS / Digital : DVI DMPM	DVI DMPM	Analog : VESA DPMS / Digital : DVI DMPM	Analog : VESA DPMS / Digital : DVI DMPM		Power Management
English, Japanese	English, Japanese	English, Japanese	English, Japanese	English, German, French, Italian, Japanese, Spanish, Swedish	English, German, French, Italian, Japanese, Spanish, Swedish	English, German, French, Italian, Japanese, Spanish, Swedish		OSD Languages
82 mm	82 mm	82 mm	100 mm	82 mm	82 mm	100 mm		Height Adjustment Range
90°	90°	90°	90°	90°	90°	90°		Pivot
40° Up, 0° Down / 35° Right, 35° Left	40° Up, 0° Down / 35° Right, 35° Left	40° Up, 0° Down / 35° Right, 35° Left	40° Up, 1° Down / 35° Right, 35° Left	40° Up, 0° Down / 35° Right, 35° Left	40° Up, 0° Down / 35° Right, 35° Left	40° Up, 1° Down / 35° Right, 35° Left		Tilt / Swivel
With Stand : 337 x 493 - 575 x 208.5 mm Without Stand : 337 x 441 x 78.5 mm	With Stand : 347 x 497.5 - 579.5 x 208.5 mm Without Stand : 347 x 449 x 86.5 mm	With Stand : 347 x 497.5 - 579.5 x 208.5 mm Without Stand : 347 x 449 x 86.5 mm	With Stand : 399 x 404 - 504 x 202.7 mm Without Stand : 399 x 328 x 65 mm	With Stand : 368 x 515.5-597.5 x 208.5 mm Without Stand : R31 368 x 486 x 88.5 mm / R31-C 368 x 486 x 90 mm	With Stand: 472 x 459 - 541 x 208.5 mm Without Stand : 472 x 373 x 69 mm	With Stand : 414 x 409.5 - 509.5 x 202.7 mm Without Stand : 414 x 340 x 64 mm		Dimensions (W x H x D)
With Stand : 8.3 kg Without Stand : 5.3 kg	With Stand : 10.5 kg Without Stand : 7.3 kg	With Stand : 10.5 kg Without Stand : 7.3 kg	With Stand : 7.8 kg Without Stand : 5.5 kg	With Stand : R31 9.2 kg / R31 - C 10.0 kg Without Stand : R31 6.2 kg / R31 - C 7.0 kg	With Stand : 10.2 kg Without Stand : 7.0 kg	With Stand : 8.1 kg Without Stand : 5.8 kg		Net Weight
VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)	VESA standard (100 x 100)		Hole Spacing
CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, Canadian ICES-003-A, FDA 510(k), CCC , EIZO Eco Products 2002	CE (Medical Device Directive), TÜV /GM (EN60601-1),cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, Canadian ICES-003-A, FDA 510(k), CCC	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, Canadian ICES-003-A, FDA 510(k), CCC	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-A, FCC-A, TUV/S, Canadian ICES-003-A, FDA 510(k), CCC	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-B, FCC-B, Canadian ICES-003-B, FDA 510(k), CCC, EIZO Eco Products 2002	CE (Medical Device Directive), TÜV/GM (EN60601-1), cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-B, FCC-B, Canadian ICES-003-B, FDA 510(k), CCC, EIZO Eco Products 2002	CE (Medical Device Directive), TÜV/GM (EN60601-1),cTÜVus (UL2601-1, CSA C22.2 No. 601-1), CB (IEC60601-1), VCCI-B, FCC-B, Canadian ICES-003-B, FDA 510(k), CCC, EIZO Eco Products 2002		Certifications and Standards
AC power cord, user's manual, signal cable (DVI-D~DVI-D), USB cable, warranty registration card	AC power cord, user's manual, signal cable (DVI-I~D-Sub mini 15 pin, DVI-D~DVI-D), USB cable, warranty registration card	AC power cord, user's manual, signal cable (DVI-D~DVI-D), USB cable, warranty registration card	AC power cord, user's manual, signal cable (DVI-I~D-Sub mini 15 pin, DVI-D~DVI-D), USB cable, warranty registration card	AC power cord, user's manual, Dual-Link signal cable (DVI-D~DVI-D), USB cable, EIZO LCD Utility Disk (ScreenManager Pro for Medical, ICC Profile), warranty registration card	AC power cord, user's manual, signal cables (D-Sub mini 15pin~D-Sub mini 15 pin, DVI-D~DVI-D, DVI-I~D-Sub mini 15 pin), USB cable, EIZO LCD Utility Disk (ScreenManager Pro for LCD, ICC Profile), ToneCurve Tuning Utility, warranty registration card	AC power cord, user's manual, signal cables (DVI-I~D-Sub mini 15 pin, DVI-D~DVI-D), USB cable, EIZO LCD Utility Disk (ScreenManager Pro for LCD, ICC Profile), ToneCurve Tuning Utility, warranty registration card		Supplied Accessories

[1]BNC input accepted with the RadiForce BNC Adaptor BI00FM.